

Appn.# 10/597,346 (Reistroffer)

Amendment D

Page 3 of 10

**CLAIMS:** *Please amend the claims according to the status designations in the following list, which contains all claims that were ever in the application, with the text of all active claims.*

### CLAIMS

I claim:

1. (PREVIOUSLY PRESENTED) A rapidly igniting, prolonged burning incendiary strand for setting fire to combustible materials over an area of land, comprising:

a strand body of indeterminate length, comprising a plurality of co-linearly arranged and connectively assembled components forming a contiguous cross-sectional shape selected from the group consisting of tape, strip, ribbon, tube, filament, rope and cord;

at least one solid or semi-solid fuel component arranged along the longitudinal axis of the strand body, the fuel component being operable when ignited to undergo self-sustained combustion in the presence of atmospheric oxygen and emitting flames from the exterior surface of the strand; and

rapid axial ignition means for initiating combustion of the fuel component, wherein the fuel component is ignited rapidly along the longitudinal axis of the strand body at a predetermined rate of combustive ignition propagation.

2. (PREVIOUSLY PRESENTED) The incendiary strand of claim 1, wherein the fuel component is selected from the group consisting of waxes, tars, natural resins, latex rubbers, gelled hydrocarbons, thermoplastic polymers, and silicon rubber.

Appn.# 10/597,346 (Reistroffer)

Amendment D

Page 4 of 10

3. – 6. (CANCELED)

7. (PREVIOUSLY PRESENTED) The incendiary strand of claim 2, wherein the fuel component is a composition comprising conifer tree resins.

8. – 10. (CANCELED)

11. (PREVIOUSLY PRESENTED) The incendiary strand of claim 1, wherein the fuel component sustains burning at any point along the strand for a period of time sufficient to raise the temperature of nearby vegetative matter to the point of ignition.

12. (PREVIOUSLY PRESENTED) The incendiary strand of claim 1, wherein the fuel component exhibits flaming combustion for a duration of from ten seconds to five minutes, as measured at any point along the length of the strand.

13. (PREVIOUSLY PRESENTED) The incendiary strand of claim 1, wherein the rapid axial ignition means comprises an elongate pyrotechnic element.

14. (PREVIOUSLY PRESENTED) The incendiary strand of claim 13, wherein the elongate pyrotechnic element is confined within the interior of an elongate close-fitting conduit.

15. (PREVIOUSLY PRESENTED) The incendiary strand of claim 13, wherein the elongate pyrotechnic element is arranged centrally in a channel defined by other structural elements of the strand.

Appn.# 10/597,346 (Reistroffer)

Amendment D

Page 5 of 10

16. (PREVIOUSLY PRESENTED) The incendiary strand of claim 1, wherein the fuel component comprises one or more planiform layers(s) of combustible thermoplastic resin, and wherein the fuel component and elongate pyrotechnic element are laminated between an upper covering layer and a lower covering layer to form a tape.

17. (PREVIOUSLY PRESENTED) The incendiary strand of claim 16, wherein the fuel component layer of the tape is in a discontinuous pattern forming a central longitudinal gas channel in connective arrangement with multiple lateral gas channels.

18. (PREVIOUSLY PRESENTED) The incendiary strand of claim 17, wherein the lateral gas channels are open to the exterior lateral edges of the tape and are longitudinally offset to either side of the longitudinal gas channel.

19. – 25. (CANCELED)

26. (CURRENTLY AMENDED) The incendiary strand of claim 13, wherein the pyrotechnic element comprises a cellulose fiber substrate that is ~~impregnated and~~ coated with a pyrotechnic composition comprised of oxidizer and fuel compounds.

27. – 34 (CANCELED)

35. (PREVIOUSLY PRESENTED) The incendiary strand of claim 1, further comprising means for fragmentation of the strand into separate burning segments, subsequent to ignition.

Appn.# 10/597,346 (Reistroffer)

Amendment D

Page 6 of 10

36. (PREVIOUSLY PRESENTED) The incendiary strand of claim 35, wherein the means for fragmentation of the strand subsequent to ignition comprises rapidly burning segments of the strand body placed at selective intervals along the strand.

37. – 43. (CANCELED)

44. (PREVIOUSLY PRESENTED) The incendiary strand of claim 1, further comprising weatherproofing means for preventing infiltration of moisture into the strand body.

45. – 46. (CANCELED)

47. (CURRENTLY AMENDED) A method of igniting vegetative matter over an area of land using the ~~linear~~ incendiary strand of claim 1, comprising the steps of:

laying out one or more ~~linear~~ incendiary strand(s) in a predetermined pattern throughout the area to be burned; and

igniting each incendiary strand in succession at intervals of time selected to achieve the desired fire behavior characteristics.

48. (CANCELLED)

49. (CURRENTLY AMENDED) The method of claim 47 ~~[[48]]~~, further comprising the steps of:

Appn.# 10/597,346 (Reistroffer)

Amendment D

Page 7 of 10

placing ~~multiple additional linear~~ incendiary strands along strips in a predetermined spatial relationship to selected fire control lines, parallel in orientation to the first linear incendiary strand, at a distance of spacing between strips that is determined according to fuel, weather and topographical conditions; and

igniting the ~~additional~~ incendiary strands in a sequence timed to result in a line of fire being drawn in a desired direction of fire spread by convective and radiative influences of the multiple lines of fire initiated in the vegetative matter, from the control line outwardly toward the advancing wildfire and against the direction of the prevailing winds.

50. – 75. (CANCELLED)

76. (NEW) A rapidly igniting, prolonged burning incendiary tape for setting fire to combustible materials over an area of land, comprising:

an elongate tape body of indeterminate length, comprising a plurality of co-linearly arranged component layers forming an adhesively bound lamination;

an upper covering layer and a lower covering layer of a material selected from the group consisting of polymeric film, coated fabric and paper;

at least one adhesive fuel component layer arranged in a discontinuous pattern between the upper covering layer and lower covering layer, the pattern forming a central longitudinal gas channel in connective arrangement with multiple lateral gas channels open to the exterior lateral edges of the

Appn.# 10/597,346 (Reistroffer)

Amendment D

Page 8 of 10

tape, and wherein the adhesive fuel component is selected from the group consisting of waxes, tars, natural resins, latex rubbers, gelled hydrocarbons, thermoplastic polymers, and silicon rubber;

one or more elongate pyrotechnic elements arranged within the central longitudinal gas channel, wherein operatively, upon ignition from an external heat source, a combustive reaction is conducted along the pyrotechnic element at a predetermined rate of propagation, igniting the co-linearly arranged fuel component through lateral heat transfer and projecting flames to the exterior of the tape through the lateral gas channels.